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ABSTRACT

This study was conducted to construct a normalized table which described the typical personality profile of nontraditional female undergraduate full-time students at Middle Tennessee State University (MTSU) in Murfreesboro, Tennessee. It was hypothesized that the nontraditional female undergraduate at MTSU would differ from both traditional female undergraduates and the general adult female population. The defining criteria of an MTSU female, registered for the Spring, 1989 semester, who was 25 years of age or over, in undergraduate studies, and carrying 12 or more credit hours, were met by 590 students. The Sixteen Personality Factor Questionnaire (16PF): Form A 1967-68 Edition Revised was mailed to all qualified students. Responses were received from 192 students. Findings revealed that the nontraditional female students in the sample were more reserved, assertive, venturesome, trusting, practical, self-sufficient, and controlled than either traditional female undergraduates or adult females in general. In addition, the nontraditional female undergraduate in the sample was more sober, conscientious, and tough-minded than traditional female undergraduates and more intelligent, forthright, experimental, and tense than the general female adult population. (NB)

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Nontraditional Female Undergraduates

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Normative Data on the 16PF for
Nontraditional Female Undergraduates

The purpose of this study was to construct a normalized table which described the typical personality profile of nontraditional female undergraduate full-time students at Middle Tennessee State University (MTSU), Murfreesboro, Tennessee. Located in Tennessee's geographic center, MTSU is a predominantly white coeducational regional university. The defining criteria of an MTSU female, registered for the Spring, 1989 semester, who was 25 years of age or over, in undergraduate studies, and carried 12 or more credit hours, encompassed 590 students. The Sixteen Personality Factor Questionnaire (16PF): Form A 1967-68 Edition Revised was mailed to them. A response rate of 32% or 192 participants constituted the sample population. Nine variables including the six criterion variables plus race, school, and levels were used to determine the representation between the populations. Using chi-square analysis with $p < .05$, race and age differed. However, sufficient evidence allowed the sample population to represent the parent population, treating the sample as the University's nontraditional population for the normative tables and means comparison studies. The normative tables covered the Sixteen Primary Personality Factors, First Four Second-Order Factors, and Validity Scales. The means for the nontraditional population's factors were compared to 16PF Norms for College Students, Female: Form A, and 16PF Norms for General

Population, Female: Form A. Two hypotheses were established: (a) there were significant differences between nontraditional female undergraduate full-time students and traditional female undergraduate full-time students, and (b) there were significant differences between nontraditional female undergraduate full-time students and general adult females. A statistical z test, $p < .05$ (two-tailed) found the following factors' means to be different. Nontraditional female students differed from traditional female students on A, E, F, G, H, I, L, M, Q2, and Q3. Nontraditional female students differed from the general adult females on A, B, E, H, L, M, N, Q1, Q2, Q3, and Q4. A typical profile pattern expressed by a nontraditional female undergraduate full-time student at MTSU was (a) to both the traditional female undergraduate full-time student and the general adult female, she was more reserved, assertive, venturesome, trusting, practical, self-sufficient, and controlled, (b) to the traditional female undergraduate full-time student, she also exhibited more sober, conscientious, and tough-minded traits, and (c) to the general adult female, she was additionally more intelligent, forthright, experimental, and tense.

Sixteen Primary and First Four Secondary Source Factors

The source factors are on a bipolar continuum and for scoring purposes range from low to high. Briefly listed are the bipolar characteristic expressions of the sixteen primary source factors (traits) A through Q4, and the four secondary factors QI through QIV (Cattell et al., 1970). Because sten scores are an integral part of a 16PF normalized table the low range (left pole) descriptions, given first, are for stens one, two, and three versus the high range (right pole) depicted by stens eight, nine, and ten. An "average" raw score refers to those scores falling between stens four through seven. Therefore, a sten score either below or above this range implies a deviation from the "average" (Cattell et al., 1970).

I. Primaries

FACTOR A

Reserved, detached, critical, cool, impersonal
versus
Warmhearted, out-going, participating, interested in people,
easy-going

FACTOR B

Less intelligent, concrete-thinking--lower scholastic mental
capacity
versus
More intelligent, abstract-thinking, bright--higher
scholastic mental capacity

FACTOR C

Affected by feelings, emotionally less stable, easily upset,
changeable--lower ego strength
versus
Emotionally stable, mature, faces reality, calm, patient
--higher ego strength

FACTOR E

Humble, mild, accommodating, easily led, conforming --
submissiveness

versus

Assertive, aggressive, authoritative, competitive, stubborn
--Dominance

FACTOR F

Sober, prudent, serious, taciturn

versus

Happy-go-lucky, impulsively lively, enthusiastic, heedless

FACTOR G

Expedient, disregards rules, feels few obligations--weaker
superego strength

versus

Conscientious, persevering, proper, moralistic, rule-bound
--stronger superego strength

FACTOR H

Shy, restrained, threat-sensitive, timid

versus

Venturesome, socially bold, uninhibited, spontaneous

FACTOR I

Tough-minded, self-reliant, realistic, no-nonsense

versus

Tender-minded, intuitive, unrealistic, sensitive

FACTOR L

Trusting, adaptable, free of jealousy, easy to get on with
versus

Suspicious, self-opinionated, hard to fool, skeptical,
questioning

FACTOR M

Practical, careful, conventional, regulated by external
realities

versus

Imaginative, careless of practical matters, unconventional,
absent-minded

FACTOR N

Forthright, natural, genuine, unpretentious--artlessness

versus

Shrewd, calculating, socially alert, insightful--shrewdness

FACTOR O

Unperturbed, self-assured, confident, secure,
self-satisfied--untroubled adequacy

versus

Apprehensive, self-reproaching, worrying, troubled--guilt
proneness

FACTOR Q1

Conservative, respecting established ideas, tolerant of traditional difficulties--conservatism of temperament
versus
Experimenting, liberal, analytical, likes innovation
--radicalism

FACTOR Q2

Group oriented, a "joiner" and sound follower--group adherence
versus
Self-sufficient, prefers own decisions, resourceful
--self-sufficiency

FACTOR Q3

Undisciplined self-conflict, careless of protocol, follows own urges--low integration
versus
Controlled, socially precise, following self-image, compulsive--high self-concept control

FACTOR Q4

Relaxed, tranquil, torpid, unfrustrated--low ergic tension
versus
Tense, frustrated, driven, restless, overwrought--high ergic tension

II. Secondaries

FACTOR QI

Introversion

versus

Extroversion

FACTOR QII

Low Anxiety

versus

High Anxiety

FACTOR QIII

Sensitivity, Emotionalism

versus

Tough Poise

FACTOR QIV

Dependence

versus

Independence.

The hypothesis testing of the means are available on Tables 1 and 2. Presented are two norm tables, the sixteen primary personality factors (Table 3) and the first four second-order factors (Table 4).

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Cattell, R. B., Eber, H. W., & Tatsuoka, M. M. (Eds.). (1970). Handbook for the sixteen personality factor questionnaire (16PF). Champaign. IL: IPAT..

Table 1

Means Comparison: Nontraditional Female Undergraduates to
Traditional Female Undergraduates: Using a z test

Factor	Calculated <u>z</u>	Hypothesis	Decision
A	-7.126	Accept	Significant
B	-0.165	Reject	Not significant
C	1.302	Reject	Not significant
E	2.606	Accept	Significant
F	-7.612	Accept	Significant
G	5.553	Accept	Significant
H	2.952	Accept	Significant
I	-2.862	Accept	Significant
L	-2.438	Accept	Significant
M	-3.492	Accept	Significant
N	-0.664	Reject	Not significant
O	-1.316	Reject	Not significant
Q1	0.917	Reject	Not significant
Q2	10.287	Accept	Significant
Q3	6.710	Accept	Significant
Q4	0.501	Reject	Not significant

$p < .05$, two-tailed, critical z value = 4.417.

Table 2

Means Comparison: Nontraditional Female Undergraduates
to General Adult Females: Using a z Test

Factor	Calculated <u>z</u>	Hypothesis	Decision
A	-4.617	Accept	Significant
B	11.491	Accept	Significant
C	0.317	Reject	Not Significant
E	4.181	Accept	Significant
F	1.791	Reject	Not Significant
G	1.324	Reject	Not Significant
H	3.813	Accept	Significant
I	0.074	Reject	Not Significant
L	3.475	Accept	Significant
M	-3.853	Accept	Significant
N	-5.307	Accept	Significant
O	0.308	Reject	Not Significant
Q1	2.591	Accept	Significant
Q2	8.336	Accept	Significant
Q3	6.261	Accept	Significant
Q4	3.463	Accept	Significant

$p < .05$, two-tailed, critical z value = 4.417.

Table 3: Norms: Form A: Female
Nontraditional Undergraduate Full-time Students
Sixteen Primary Personality Factors
[based on age 33 (33-6-19); N = 192]

1	2	3	4	5	6	Sten Score		9	10	Fac- tor	M*	SD*
						7	8					
Raw Score												
0-4	5	6	7-8	9	10-11	12-13	14	15-16	17-20	A	10.10	3.10
0-4	5	6	7	8	9	10	11	12	13	B	8.81	1.82
0-7	8-9	10-11	12-14	15	16-17	18-19	20	21-22	23-26	C	15.70	3.73
0-3	4-5	6-7	8-10	11-13	14-15	16-17	18-20	21	22-26	E	12.84	4.70
0-4	5-7	8-9	10-12	13	14-16	17-19	20	21-23	24-26	F	14.20	4.58
0-4	5-8	9	10-11	12-13	14	15-16	17	18	19-20	G	13.14	3.13
0-2	3-5	6-8	9-11	12-15	16-18	19-20	21-23	24	25-26	H	14.72	5.92
0-5	6-7	8-9	10-11	12-13	14-15	16	17	18-19	20	I	13.38	3.37
0	1-2	3	4-5	6	7-8	9-10	11-12	13-14	15-20	L	7.17	3.40
0-5	6	7-8	9-10	11	12-13	14-15	16	17-18	19-26	M	12.05	3.30
0-2	3-4	5-6	7	8-9	10	11	12-13	14	15-20	N	9.10	2.92
0-3	4-5	6	7-8	9-10	11-12	13-15	16	17-18	19-26	O	10.83	3.97
0-1	2-3	4-5	6	7-8	9-10	11	12-13	14	15-20	Q1	8.36	3.25
0-4	5-7	8-9	10	11-12	13-14	15	16	17-18	19-20	Q2	12.45	3.30
0-6	7-8	9-10	11	12-13	14	15-16	17	18	19-20	Q3	13.21	3.00
0-4	5-6	7-9	10-11	12-14	15-17	18-19	20-21	22	23-26	Q4	14.26	4.70
1	2	3	4	5	6	7	8	9	10	Sten Score		

* M = Mean, SD = Standard Deviation

Table 4: Norms: Form A: Female
Nontraditional Undergraduate Full-time Students
First Four Second-Order Factors
(based on age 33 (33-6-19); N = 192)

1	2	3	4	5	6	Sten Score		9	10	Fac- tor	M*	SD*
						7	8					
Raw Score												
0.00	2.21	2.90	3.56	4.73	5.75	6.89	7.65	8.62	9.51	QI	5.77	1.96
-	-	-	-	-	-	-	-	-	and above			
2.21	2.90	3.56	4.73	5.75	6.89	7.65	8.62	9.51				
0.00	2.53	3.09	4.46	5.30	5.96	7.00	7.96	9.13	9.83	QII	6.14	1.87
-	-	-	-	-	-	-	-	-	and above			
2.53	3.09	4.46	5.30	5.96	7.00	7.96	9.13	9.83				
0.00	0.98	1.77	2.64	3.69	4.67	5.84	6.46	7.65	8.88	QIII	4.71	1.98
-	-	-	-	-	-	-	-	-	and above			
0.98	1.77	2.64	3.69	4.67	5.84	6.46	7.65	8.88				
0.00	2.39	2.90	3.80	4.68	5.44	6.29	7.31	8.19	8.58	QIV	5.50	1.70
-	-	-	-	-	-	-	-	-	and above			
2.39	2.90	3.80	4.68	5.44	6.29	7.31	8.19	8.58				
1	2	3	4	5	6	7	8	9	10	Sten Score		

* M = Mean, SD = Standard Deviation

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